

**ABSTRACT**

In a band gap circuit relating to the present invention that comprises a differential amplifier, a potential difference occurs at an inverting input terminal and a noninverting input terminal responding to fluctuation of the voltage of an output terminal VOUT. And, an n-type transistor N3, which is connected to the output terminal VOUT and the ground and is directly connected to an output terminal of the differential amplifier, causes the excess current of the output terminal VOUT to flow in the ground responding to fluctuation of the potential at the output terminal of the differential amplifier.

Furthermore, the band gap circuit relating to the present invention comprises: a p-type transistor P5 that has a resistive component to be connected to a power supply voltage VDD and the output terminal VOUT and is cascaded; and a resistor R2 having a capacitive component.